

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A centrifugal air blower comprising:
a fan having a plurality of blades spaced circumferentially therearound for generating an air flow;

a scroll casing ~~housing~~, said fan being positioned within said scroll casing therein and said scroll casing defining a first discharge passage for flowing air therethrough;

an extended case connected to said first discharge passage in said scroll casing and defining therein a second discharge passage which cross-sectional area progressively increases toward an outlet thereof; and

air guide means for guiding air in said second discharge passage, said air guide means having an arcuately shaped surface extending along at least one of a bottom surface and a ceiling surface of said second discharge passage defined in said extended case for decreasing the cross-sectional area of the second discharge passage.

2. (Currently Amended) A centrifugal air blower according to claim 1, wherein said air guide means has an edge at a position ~~X~~-A to start increasing the vertical size of an outer wall of said extended case and an opposite edge at a position ~~Y~~-B to start increasing the vertical size of an inner wall of the extended case,

said position ~~X~~ A being positioned upstream of said position ~~Y~~ B. |

3. (Original) A centrifugal air blower according to claim 1, wherein said arcuately shaped surface of said air guide means has a radius R1 of curvature near an outer wall of the extended case and a radius R2 of curvature near an inner wall of the extended case, said radius R1 of curvature being greater than said radius R2 of curvature.

4. (Original) A centrifugal air blower according to claim 3, wherein a ratio R1/R2 between said radius R1 of curvature near the outer wall of said extended case and said radius R2 of curvature near the inner wall of said extended case ranges from 2.90 to 3.15.

5. (Original) A centrifugal air blower according to claim 1, wherein said air guide means is disposed on a bottom surface of said second discharge passage.

6. (Original) A centrifugal air blower according to claim 1, wherein said air guide means is disposed on a ceiling surface of said second discharge passage.

7. (Original) A centrifugal air blower according to claim 1, wherein said air guide means is disposed on both a bottom surface and a ceiling surface of said second discharge passage.

8. (Original) A centrifugal air blower according to claim 1, wherein said air guide means is integral with said extended case and disposed in said second discharge passage.

9. (Original) A centrifugal air blower according to claim 1, wherein said air guide means is separate from said extended case and fixed to said second discharge passage.

10. (New) A centrifugal air blower comprising:
a fan having a plurality of blades spaced circumferentially therearound for generating an air flow;
a scroll casing, said fan being positioned within said scroll casing and said scroll casing defining a first discharge passage for flowing air therethrough;
an extended case connected to said first discharge passage in said scroll casing and defining therein a second discharge passage which cross-sectional area progressively increases toward an outlet thereof; and
air guide means for guiding air in said second discharge passage, said air guide means having an arcuately shaped surface extending along said second discharge passage defined in said extended case, said arcuately shaped surface of said air guide means has a radius R_1 of curvature near an outer wall of the extended case and a radius R_2 of curvature near an inner wall of the extended case, said radius R_1 of curvature being greater than

said radius R2 of curvature and a ratio R1/R2 ranges from 2.90 to 3.15.

11. (New) A centrifugal air blower according to claim 10, wherein said air guide means has an edge at a position A to start increasing the vertical size of an outer wall of said extended case and an opposite edge at a position B to start increasing the vertical size of an inner wall of the extended case, said position A being positioned upstream of said position B.

12. (New) A centrifugal air blower according to claim 10, wherein said air guide means is disposed on a bottom surface of said second discharge passage.

13. (New) A centrifugal air blower according to claim 10, wherein said air guide means is disposed on a ceiling surface of said second discharge passage.

14. (New) A centrifugal air blower according to claim 10, wherein said air guide means is disposed on both a bottom surface and a ceiling surface of said second discharge passage.

15. (New) A centrifugal air blower according to claim 10, wherein said air guide means is integral with said extended case and disposed in said second discharge passage.

16. (New) A centrifugal air blower according to claim 10, wherein said air guide means is separate from said extended case and fixed to said second discharge passage.